

**Notice of Allowability**

Application No.

10/822,833

Examiner

M Rachuba

Applicant(s)

OYAMA ET AL.

Art Unit

3723

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to communication received 3/21/06.
2. ☒ The allowed claim(s) is/are 1-4.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |  |
|---|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date <u>8/24/04</u> | 7. <input type="checkbox"/> Examiner's Amendment/Comment                               |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material                              | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance   |
|   | 9. <input type="checkbox"/> Other _____.   |

***Election/Restrictions***

1. Applicant's arguments concerning the restriction requirement, received 21 March 2006, are persuasive, and claims 1-4 have been examined on the merits.

**REASONS FOR ALLOWANCE**

2. The following is an examiner's statement of reasons for allowance: the prior art does not disclose or fairly teach a method of lapping a medium-opposing surface of a thin-film magnetic head, comprising the steps of preparing a magnetic head bar in which thin-film magnetic heads are arranged in a row, each of the thin-film magnetic heads including a magneto resistive device for reproducing, an inductive electromagnetic transducer for recording, a heater for generating heat when energized, the heaters in the respective thin-film magnetic heads being electrically connected to their neighbors in series; connecting a variable resistor to each of the heaters in parallel; varying resistance of each of the variable resistors depending on an amount that the medium-opposing surface of the thin-film magnetic head is to project; polishing the medium-opposing surface of the thin-film magnetic head in the magnetic head bar while energizing the heaters. Further, the prior art does not disclose or fairly teach magnetic head bar holding unit, comprising: a bar holding portion for holding a magnetic head bar in which thin-film magnetic heads are arranged in a row, each of the thin-film magnetic heads including a heater for generating heat when energized; and variable resistors to be connected to each of the heaters in parallel. Further the prior art does not disclose or fairly teach a lapping device, comprising: a magnetic head bar holding unit having a bar holding portion for holding a magnetic head bar in which thin-film magnetic heads

Art Unit: 3723

are arranged in a row each of the thin-film magnetic heads including a heater for generating heat when energized, and variable resistors to be connected to each of the heaters in parallel, a polishing unit for polishing a medium-opposing surface of the magnetic head bar held by the bar holding unit. The closest prior art, Ota et al, 6,945,847 discloses the claimed invention except for the use of a variable resistor connected to each of the heaters in parallel, and varying the resistance of each of the resistors depending on an amount that the surface is to project. '847 disclose energizing the heaters, and polishing the magnetic head bar, but not varying the amount of heat put out by each heater in the magnetic head bar.

3. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

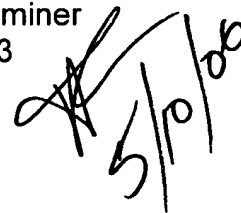
4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to M Rachuba whose telephone number is 571-272-4493. The examiner can normally be reached on Monday-Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Hail can be reached on 571-272-4485. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3723

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

M Rachuba  
Primary Examiner  
Art Unit 3723

Handwritten signature and date 5/10/00.